## PROJECT 10073 RECORD CARD

1. DATE  15 December 1957  3. DATE-TIME GROUP  Local  GMT 16/0040Z	2. LOCATION  Elmendorf AFB,  4. TYPE OF OBSERVATIO  Ground-Visual  XXX Air-Visual		
5. PHOTOS  D Yes  XQ No	6. SOURCE Military		Probably Astronomical     Possibly Astronomical     Possibly Astronomical
7. LENGTH OF OBSERVATION  8 secnds	8. NUMBER OF OBJECTS	9. COURSE	Other Insufficient Data for Evaluation Unknown
Round, brilliant blue- size of silver dollar. appearance to falling magnesium flare. Appro was falling straght do fuzzy at the edges. Tr smoke then burst into appeared to disintegra	Similar in star or burning x 2 ft in length, wn and appeared ailed black yellow flame &	Geminids.show	meteor from the

ATIC FORM 329 (REV 26 SEP 52)

Wichen Elmindarf AFB 1305057 10 SQE051LYADOS YDD008 XYD009 QXC009 QDA001 KQP003AGA087 RR RJEPHQ RJEDDN RJEDSO-DE RJKDAG 165 RN172000Z ZEX FM COMDR 317TH FINCEPTRON ELMENDORF TO RJEDHQ/HQ USAF RJEDDN/COMDR ADC RJEDSQ/COMDR ATIC\_ INFO ZEN/COLDR 10TH AD (DEF) UNCL FROM 317FIS 0054 ATTN: ACS/I ATTN: ACS8 ATTN: ACS/IAJTN: D/I SUBJECT: UFOB A. ROUND B. SILVER DOLLAR C. ERILLIANT BLUE-WHITE D. ONE E. N/A F. OBJECT WAS SIMILAR IN APPEARANCE TO FALLING STAR OR BURNING MAGNESIUM FLARE. PD OBJECT WAS APPROX TWO FEET IN LENGTH COMMA WAS FALLING STRAIGHT DOWN AND APPEARED

FUZZY AT THE EDGES PD G. OBJECT TRAILED BLACK SMOKE UNTIL SOME DISTANCE BELOW THE OFSERVER WHEN IT BURST INTO YELLOW FLAME AND APPEARED TO DISINTEGRATE PD H. NCNE I. N/A 2. A. VISUALLY OBSERVED BY PILOT WHILE HE WAS AIRPORNE. NEGATIVE AZIMUTH, eleVATION D. FALLING STRAIGHT DOWN. E. FLARED INTO YELLOW FLAME AND APPEARED TO DISINTEGRATE. F. APPROXIMATELY EIGHT SECCODS. 3. A. AIR-VISUAL B. N/A C. F-102A, 38,000 FEET, NORTHEAST, EMMENDORE AFR 4. A. 16 9949Z DEC 57 0040-10= 1440 5. AIREORNE, 38,000 FET, APPROXIMATELY 75 MILES S. W. OF ANCHORAGE, ALASKA. 6. A. N/A PAGE THREE RJKDAG 167 I. RAYNCND M. VISCARRA, 1/LT, 317TH FIGHTER INTERCEPTOR SQUADRON, PILCI, RELIABLE. 7. A. NEGATIVE B. NOT KNOWN

D. CAVU AT 38,000 FEET	(
E. NONE	
F. NONE	(
(8) NONE	C
(9) N/A	
(12) NONE	
(11) CYRUS L. BROOKS, 1/LT, USAF, INTELLIGENCE OFFICER. LIEUTENANT	C
VISCARRA IS A VERY RELIABLE OFFICER AND FROM HIS DESCRIPTION	
AND MY LIMITED KNOWLEDGE ON THE SUBJECT, I WOULD JUDGE THIS	
SIGHTING TO BE A METEOR.	C
(12) NONE Check shows not sputnick	
ET Cher	C
18/2339Z DEC RJKDAG (meller) Seminidas.	E
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Field Zepas.	. 6
	W

12.744

ASTRONOMY

# Venus Is Christmas Star

A crescent moon and the planet Venus will be close together on December 24, making a brilliant pair that lights the Christmas sky.

## By JAMES STOKLEY

This year we will have a real Christmas tur. The planet Venus, which has been increasing in prominence during the autumn, will be at its greatest brilliance on Dec.

Venus will be blazing in the southwest, until it follows the sun below the horizon, more than three hours later. But even this will not be the full extent of the display. On the 24th, the moon, in a crescent phase, three days after the new moon, will pass just to the north of Venus. While the closest approach comes, for Americans, during daylight hours, they will still be close together that evening, Christmas eve, and will form a striking backdrop for the carolers singing their Yuletide greetings.

Venus is the only planet that can be seen well on December evenings. On the seventh. Mercury is farthest east of the sun, and will remain briefly in the southwestern sky after the sun has set. Possibly, if you have a very clear view in that direction, and look closely, you can get a glimpse of this innermost of all the planets, but this is not really a favorable time to see Mercury.

No planers appear on the accompanying maps of the December evening skies, for these show their appearance later in the evening, after Venus has set. They are drawn for about 10:00 p.m., your own kind kind of standard time, on Dec. 1, and an hour earlier at the middle of the month.

In the southeast there is now visible the brilliant array of stars which make the skies of the winter evening so beautiful.

#### Dog-Star is Brightest

Brightest of these stars is Sirius, the dogstar, part of Canis Major, the great dog, shown near the horizon. However, its low altitude causes a partial diminution of its light. Later in the night it climbs higher in the southern sky and is then even more conspicuous.

On the astronomer's scale of star brightnesses, Sirius is of magnitude minus 1.4, which means that it exceeds any other star that we can see in the nighttime sky. Compared to Venus, however, it is relatively faint, for the magnitude of that planet is minus 4.4. Venus now is nearly 16 times as bright as Sirius.

Above Sirius, Orion, the warrior, may be seen. In this group are two bright stars of the "first magnitude": Berelgeuse, to the lett, and Rigel, a little lower and to the right. Between them is a row of three fainter stars that form Orion's belt.

Directly above Orion is Taurus, the bull,

with Aldebaran as the brightest star; dis-

To the left of Taurus is Auriga, the charioteer, with the star Capella, another of the first magnitude.

Descending from Capella, we come to Gemini, the twins, with the stars called Castor and Pollux, of which the latter is the brighter. And between Gemini and Canis Major stands Canis Minor, the lesser dog, with Procyon as the brightest star.

Over toward the southwest are found the remnants of the constellations of the autumn evenings. Near the horizon, as shown on the maps, or higher if it is earlier in the evening, is Vega, about all that is seen of Lyra, the lyre. Above and to the left is Cygnus, the swan, with Deneb. While Vega and Deneb both are first magnitude stars, their low altitude makes them look fainter.

About 3:30 a. m., at the beginning of December, and 1:30 a. m., at the end, another planet, Jupiter, appears in the southeast, in Virgo, the virgin. Its brightness now is just about the same as that of Sirius. Mars, of the second magnitude,

rises later, about two hours before the sun, in Libra, the scales.

If, on Christmas eve, when the crescent moon is standing nearby, you look at Venus through a telescope, you will find that it also is in a crescent phase.

#### Crescent Venus

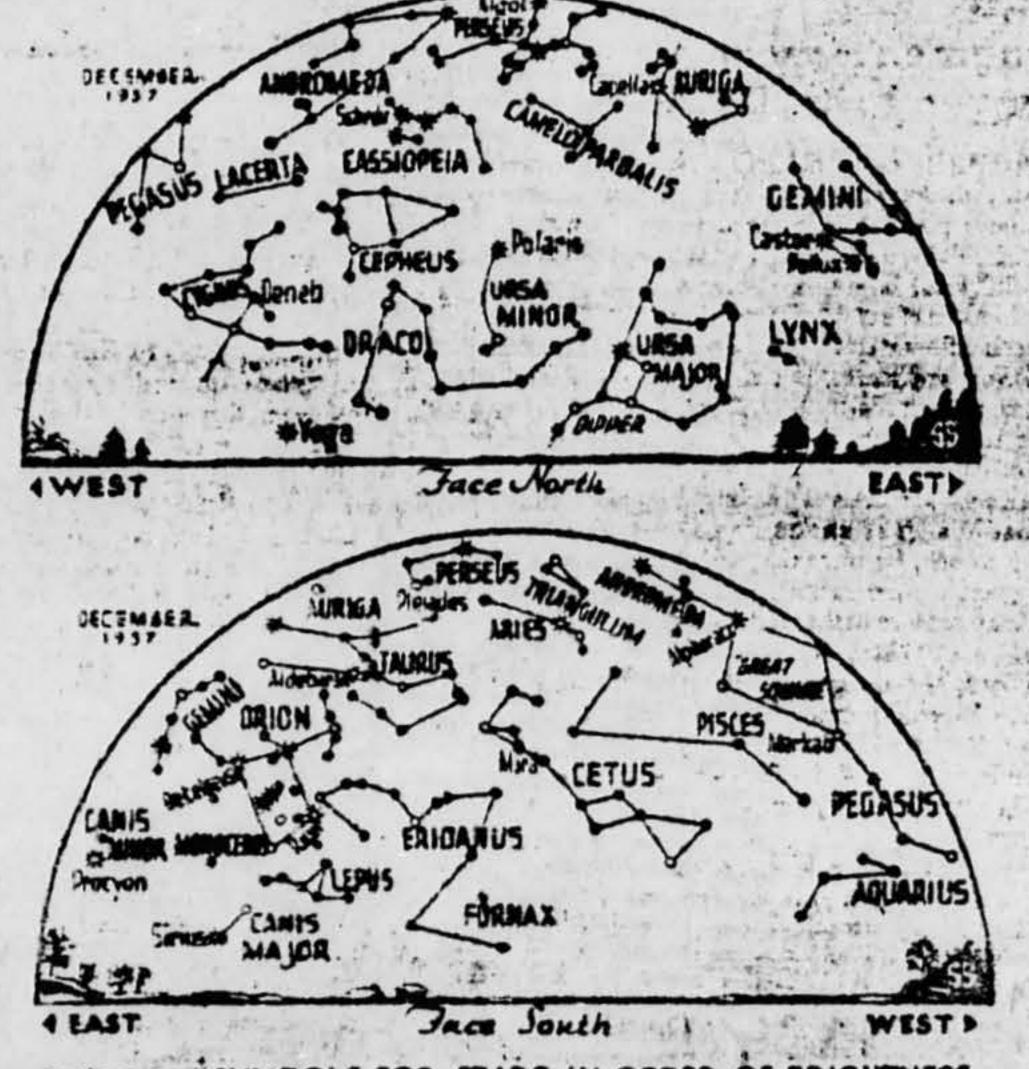
It will not be quite as thin a crescent as that of the moon, but more like the moon some two days later, or about five days after it is new.

The reason for the lunar phases is found in the fact that, as the moon revolves around the earth, it presents to our view varying amounts of its illuminated hemisphere.

At new, it is practically between the sun and us; the sunlit half is entirely turned away and we see nothing. But a few days later, as the moon swings eastward from the direction of the sun, it remains in the western sky for a while after the sun has set. A narrow sliver of the bright half then appears to us, as a crescent. Then, as it swings still farther away from the sun, half, three-quarters, and finally all, of the sunlit side is presented to us, bringing the full moon.

This takes about two weeks. During the next two weeks the changes occur in reverse order, and the moon is new once again.

Something similar happens to Venus



\* . SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

UNIVERSE

Like the moon, it has no light of its own but is illuminated by the sun; so that one half is bright and the opposite half dark.

Last April 14 it was out beyond the sun, with the entire bright hemisphere turned . earthwards. Since then it has been moving and is now coming between the earth and sun. Thus, most of its sunlit hemisphere is turned away, and we have a crescent phase.

On Jan. 28 it will be, nearly, directly between us and the sun, and this will correspond to new moon. After that it will become a crescent again, visible in the morning sky before sunrise.

Unlike the moon, Venus is always so far away that only through a telescope are its phases visible.

The phases of Venus differ from those of the moon in another respect.

As the moon travels around the earth, its distance does not change very greatly, only from about 221,000 miles to 253,000 miles.

Thus there is no great change in its apparent size, and the diameter of the full moon is about the same as when it is in a narrow crescent phase. But when Venus is full it is out far beyond the sun, about 160,000,000 miles away. Just before Christmas it will be less than 40,000,000 miles away, and on Jan. 28 its distance will be about 26,000,000 miles. Thus, as it gets near the "new" phase, it is much larger, seemingly, in the sky.

That is why it is brightest when a crescent. Although less than halt of the bright side is visible to us, its prosimity more than makes up for this, and the part we can see fills the largest area of the sky. Then it is at the greatest brilliance.

### Winter Arrives

On Dec. 21 the sun, which has apparently been traveling southward in the sky since last June, reaches its southernmost point. This is the winter solstice—the beginning of winter in the Northern Hemisphere and it occurs at 9:49 p. m., EST.

At that moment the sun will be directly over a point near the eastern edge of the Arunes Desert, which is in Australia, on the border between Queensland and the Northern Territory. In Australia, and other southern countries, the sun will be high in the sky, marking summer's beginning.

#### Colestial Time Table for December

Dec. EST 6:10 p.m. Algol (variable star in Perseus) at minimum brightness.

1:16 z.m. Full moon.

3 10:00 p.m. Saturn on far side of sun, distance 1,030,000,000 miles. 13 early a.m. Geminid meter's shower, me-

trors apparently radiating from constellation of Gemini Moon nearest, distance 130,100 mulmight

miles 12:45 s.m. Moon in last quarter.

76 12:57 p.m. Moon passes Jus

2:15 a.m. Algol at minus

3:50 p.m. Moon. pener 20 11:00 p.m. Algol le minimum.

KAN MODEL 9:49 p.m. Wigger commences in Northera Hemisphere.

7:53 p.m. Algol at minimum. t troop.m. Venus at greatest brilliance.

137 pur. Moon passes Venus !

27 11:00 p.m. Moon farthest, distance 251,300

28 #1:52 p.m. Moon in first quarter. Subtract one hour for CST, two hours for MST, and three for PST.

.. Science News Letter, November 23, 1957

SOURCE: FLYING SAUCERS: MAY 58

#### MYSTERY SKY OBJECT

The OPP is investigating an unidentified "filuminated object" which darted over Eatonville 30 miles east of Chatham, Ontario, Canada, Dec. 12, 1957. It was headed in the direction of Windser.

Witnesses could give no explanation of the strange sight, but said the phenomena was "much brighter and lower than any star."

It was first spotted about 7 p.m., by Mrs. Robert Moore of RR 2, near Blenheim. She said it drew an arc over Eatonville and continued in a westward direction.

"At first I thought it was a star but it was a hundred times brighter.

"It was the size of a football and appeared quite low in the sky."

District radar units reported height at from 35,000 to 40,000 feet.

const. Ted Wickens of Chatham, and John McPherson of Ridgetown OPP were sent to the scene and both saw the object.

Wickens said he saw the object in flight for over 20 minutes.

"It was far too bright for a meteor or star."

Telephone lines into OPP headquarters in Chatham were jammed with calls from persons who sighted the object and civil defense units from as far away as Peterboro.

Cochastile, Illinois

Friday morning, December 13, 1957 (yesterday) at around 5:00

# (Concluded from Page 75)

A.M., a strange light was seen over Belleville, Illinois. About 6 miles southeast is located what is known as Scott Air Base (Army Training Base). The time that I had the pleasure of seeing "object" in question was about 8:05 A.M., hovering very stationary over Collinville, Illinois which city is located about 6 miles North of Belleville.

At this time, the sun shown so clearly upon the "object" (sunrise) that it appeared as an intense SILVER light. It appeared as you would hold a silver dollar at arm's length edge toward you and tilt it slightly showing its bottom side. Our Government reported this as a weather balloon.

Harold Parvin.
637 N. 9th St.
E. St. Louis, Ill.

## 16 - 31 DECEMBER 1957 SIGHTINGS

DATE	LOCATION	OBSERVER	EVALUATION	
17 17 17 17	Westchester, New York Atlantic Ocean (E of Bermuda) Colorado Springs, Colorado Fruita, Colorado	Military Air	Insufficient Data Astro (METEOR) Astro (METEOR) UNIDENTIFIED	
17 18 18 18	Seffner, Florida Atlantic Ocean (W of Gibralter) Oklahoma City, Oklahoma Yakima, Washington	Military Air	Insufficient Data Astro (METEOR) Aircraft Astro (METEOR)	
19	Perperell AFB, Newfoundland Canal Zone, Panama	Military Vis & RADAR	Balloon Astro (METEOR)	
20-21 21 21	Taichung, Formosa Waverly, Iowa	Multi (8 sightings)	Insufficient Data Aircraft Insufficient Data	
21	LaGrange, Georgia - Dayton, Ohio - Kansas City, Missouri		Astro (METEOR) Insufficient Data	
22	Herfordshire, England : Dayton, Chio		Astro (METEOR) Astro (VENUS)	
22	Atlanta, Georgia Bill, Wyoming See of Joseph (F. of Windirsonto's)	Middletone Aim & DADAD	Astro (VENUS) Astro (METEOR)	
23 24 25	Sea of Japan (E of Vladivostok) Marietta, Georgia South Pass, Louisiana	Military Air & RADAR	Insufficient Data Astro (METEOR) Insufficient Data	
27 27	Littleton, New Hampshire Balinger, Texas		Astro (VENUS) Aircraft	
27 29 28	Clarksville, Iowa Livermore Falls, Maine Elizabeth City, North Carolina	Multi	Aircraft Aircraft Aircraft	
29	El Paso, Texas New Orleans, Louisiane (CASE MISSI		Insufficient Data	
31	Parkview, California Duluth, Minnescta	Civilian	Balloon Insufficient Data	
ADDITIONAL REPORTED SIGHTINGS (NOT CASES)				
DATE	LOCATION	SOURCE	EVALUATION	

Science News Ltr

Space Craft Digest

Newsclipping

Newschipping

Newsclipping

Newsclipping

Dec

15

16

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31

Universe

San Marcus, Brazil

Ponta Poran, Brazil

Stockholm, Sweden

Drakestown, New Jercey

Old Saybrook, Connecticut